network; and (c) deprives Cellular One® of system access charges for phones using its network, the violation of 47 C.F.R. § 22.919 by defendants Cellular Two and Yankovsky is injuring Cellular One®.

- 9. Accordingly, Cellular One® is entitled to a permanent injunction barring defendants Cellular Two and Yankovsky from further violating 47 C.F.R. § 22.919.
- of its subscribers have had their phones unlawfully emulated without reference to the books and records of defendants Cellular Two and Yankovsky, Cellular One® is entitled to an injunction requiring defendants Cellular Two and Yankovsky to turn over to Cellular One® all books and records in their possession, custody or control relating to the emulation of cellular telephones.
- 11. Because judgment shall be entered against defendants Cellular Two and Yankovsky on consent and, therefore, no appeal will be taken, there is no just reason to delay the entry of final judgment against defendants Cellular Two and Yankovsky. See Fed. R. Civ. P. 54(b).

ORDER ON CONSENT

Based upon the foregoing Findings of Fact and Conclusions of Law, and on all the pleadings filed in this action, it is hereby

ORDERED that final judgment be entered against defendants Cellular Two and Yankovsky:

8

- (A) Permanently enjoining defendants Cellular Two and Yankovsky from emulating, altering, changing, manipulating, or tampering with the electronic serial numbers of cellular telephones, or otherwise causing cellular telephones to emit or simulate the emission of electronic serial numbers other than the electronic serial numbers originally programmed into such phones by the manufacturer (such conduct defined for purposes of this order as "emulating," "emulation," "emulated" and any other variant of the term); and
- (B) Enjoining defendants Cellular Two and Yankovsky to turn over to Cellular One® (a) documents sufficient to reveal, with respect to each and every cellular telephone emulated by Cellular Two or Yankovsky, (i) the mobile telephone number, and the electronic serial number emitted by the phone before and after emulation; and (ii) the name, home and business address, and home and business telephone number of the person for whom the cellular telephone was emulated; (b) all work orders, bills, invoices or similar documents issued by or to Cellular Two or Yankovsky in connection with the emulation of any cellular telephone; and (c) any contract, agreement or correspondence between Cellular Two or Yankovsky and any vendor, distributor, or manufacturer of hardware or software

used by Cellular Two or Yankovsky in the emulation of any cellular telephone.

Dated: Brooklyn, New York

May 29, 1995

Hon: Sterling Johnson, Jr.
U.S.D.J.

CONSENTED TO:

FRIEDMAN & KAPLAN LLP

By:

Robert D. Kaplan (RK3627)

875 Third Avenue

New York, New York 10022

(212) 833-1100

Attorneys for Plaintiff

ALLEN SIEGAL, ESQ.

Ву:

Allen Siegal (AS____)

305 Broadway

New York, New York 10007

(212) 693-0615

Attorney for Defendants Cellular Two, Inc. and

Tony Yankovsky

•

UNITED STATES DISTRICT COURT EASTERN DISTRICT OF NEW YORK

CEITHIAD TETEDUONE COMPANY d/b/a

CELLULAR TELEPHONE COMPANY, d/b/a CELLULAR ONE®

: 95 Civ. 1666 (ST)

Plaintiff,

: ORDER TO SHOW

CAUSE FOR

-against-

PRELIMINARY

CELLULAR TWO, INC., TONY YANKOVSKY, CELLULAR EMULATION SYSTEMS, INC., and ALAN J. GEDACHIAN,

INJUNCTION

·

Defendants.

- - - - - - x

Upon the annexed affidavits of Robert D. Kaplan, sworn to April 24, 1995, John P. Hart, Jr., sworn to April 25, 1995, Salvador Vega, sworn to April 24, 1995 and Leslie Hernandez, sworn to April 25, 1995, the exhibits thereto, the summons and complaint, and the memorandum of law submitted herewith, it is hereby

ORDERED that defendants Cellular Two, Inc., Tony
Yankovsky, Cellular Emulation Systems, Inc., and Alan J.

Gedachian show cause before the Honorable Sterling Johnson, Jr.

, United States District Judge, in Courtroom

in of the United States Courthouse located at 225 Cadman

14 of the United States Courthouse located at 225 Cadman Plaza East, Brooklyn, New York, on May 10, 1995, at 930 Q.m, or as soon thereafter as counsel can be heard, why an order should not be entered pursuant to 47 U.S.C. § 401(b) and/or Fed. R. Civ. P. 65 preliminarily enjoining and restraining defendants, their officers, directors,

principals, agents, servants, employees, successors and assigns, and all those acting in concert or participation with them, pending final disposition of this action, from:

- (A) Emulating, altering, changing, manipulating, or tampering with the electronic serial numbers of cellular telephones, or otherwise causing cellular telephones to emit or simulate the emission of electronic serial numbers other than the electronic serial numbers originally programmed into such phones by the manufacturer (the foregoing hereinafter defined as "emulation activities"); or
- (B) Destroying or discarding any documents, as the term "document" is defined in Fed. R. Civ. P. 34(a), relating to any emulation activities in which any defendant has participated; and it is

FURTHER ORDERED that personal service of this

Order, together with the papers upon which it was based,

upon defendants on or before 500 p.m on April 28, 1995 shall
be good and sufficient; and it is

FURTHER ORDERED that all opposition papers, if any, shall be personally served upon Friedman & Kaplan LLP, attorneys for plaintiff, on or before 500 p.m on May 5, 1995.

Dated: Brooklyn, New York April 26, 1995

/s/ Sterling Johnson, Jr.
U.S.D.J.

•

,

UNITED STATES DISTRICT COURT EASTERN DISTRICT OF NEW YORK CELLULAR TELEPHONE COMPANY, d/b/a CELLULAR ONE®

95 Civ.

Plaintiff,

AFFIDAVIT

-against-

CELLULAR TWO, INC., TONY YANKOVSKY, CELLULAR EMULATION SYSTEMS, INC., and ALAN J. GEDACHIAN,

Defendants.

STATE OF NEW JERSEY)

COUNTY OF BERGEN

)

JOHN P. HART, JR., being duly sworn, states:

1. I am Vice President, Engineering of Cellular One®. I have been with Cellular One® for approximately three years, managing the Company's engineers and Network Operations personnel. I have worked in the telecommunications industry for nearly 25 years. Prior to joining Cellular One®, I worked for New York Telephone, AT&T and NYNEX Mobile. I am thoroughly familiar with the technical aspects of the cellular industry.

Electronic Serial Mumbers and their "Emulation"

2. The electronic serial number ("ESN") of a cellular telephone is a 32-bit binary number that is factory installed in each individual phone. Each telephone has a unique ESN, just as each car has a unique Vehicle Identification Number. A phone's ESN is distinct from its

3324.1

10-digit telephone number, which is assigned by the cellular carrier.

- 3. When a customer of Cellular One³ or any other cellular carrier initiates or receives a call, his or her phone is identified to the cellular system by its ESN. By identifying the particular phone being used to the cellular system, the ESN enables the cellular carrier to authorize system usage and to bill the appropriate account for the call.
- 4. "Emulation" is the process whereby the ESN of a particular cellular telephone is altered to simulate the ESN installed in a different phone. The cellular system cannot distinguish between a phone emitting a particular ESN because that was the number factory-installed into the phone, and a phone emitting the sam. ESN because it has been emulated. As a result, emulation enables a person to make a call on one cellular telephone (the emulated phone) while charging the call to another phone (the phone originally assigned that ESN).

"Cloning" and "Extension" Phones

5. One species of emulation is known colloquially as "cloning." In this variety of emulation, thieves using sophisticated scanning equipment monitor a cellular call and determine the ESN of the transmitting phone. That ESN is then programmed into a different phone. Anyone using the altered phone will then be able to make calls that will be

interpreted by the system as originating from the phone that was "cloned." The bill for such calls will be sent to the customer whose ESN was misappropriated. When the fraud is discovered, the victim's bill is adjusted to remove the fraudulent charges and Cellular One[®] loses all revenue in connection with the unauthorized calls.

- 6. Each year, the cellular industry suffers massive losses as a result of this type of fraud. According to the Cellular Telephone Industry Association, losses from fraud totalled approximately \$500 million in the year 1994, or more than \$1.5 million each day. In the New York area alone, 1994 losses totalled approximately \$75 million.
- this case concerns -- a phone purchased by an existing Cellular One® customer is altered so that it emulates the ESN of the customer's original, authorized phone, for which he has an account. Emulators are able to achieve this result by (1) disassembling the original phone, (2) disengaging and removing the computer chip upon which the ESN is encoded, (3) placing the chip in an electronic device that manipulates the ESN by reprogramming the chip, (4) replacing the chip in the telephone, and (5) reassembling the phone. The result of the emulation is that the customer then has a second phone that is indistinguishable to the cellular system from the customer's pre-existing phone, enabling the customer to make calls from sither phone on the

existing account. The customer obtains an "extension" phone for which he pays no access charge to Cellular One.

The Harm to Cellular One from Emulated 'Extension' Phones

8. The injury inflicted by "cloning" is obvious. Cellular service is simply being stolen by thieves who make calls that will be billed erroneously to someone else's account. The injury caused by the creation of unauthorized "extension" phones with emulated ESNs is subtler but no less real.

Interference with Anti-Fraud Efforts

- 9. Cellular One® has a system in place that attempts to combat cloning. This system is able to detect when a "single" phone is being used at two or more locations at one time. Because it is obviously impossible to use one phone from two locations, the system is actually relognizing that multiple phones are emitting a single ESN.
- legitimate Cellular One® customers, like phones cloned by thieves, emit the same ESN as another phone, it is impossible to distinguish between a phone that has been emulated at a customer's request and a phone that has been cloned without the customer's knowledge. Accordingly, the use of emulated "extension" phones significantly interferes with Cellular One®'s ability to take affirmative action against users of phones tracked by the anti-fraud system. In essence, the many unsuthorized "extensions" in use act as

3324.1

a smoke screen behind which the thieves can escape detection.

Interference with System Operation

- interferes with the proper operation of Callular One®'s system. Because there is no way for Callular One® to determine how many of its customers have had their phones emulated, it is not possible for Callular One® to properly assess the level of expected system usage. Customers with emulated phones are likely to use the system more frequently than other customers, either because they will more often have a phone available to them or because the emulated phone is given to a second individual.
- predicting system usage, ESN emulation interferes with Cellular One®'s ability to accurately predict the need to expand system capacity. Capacity is limited, and the drain on system resources leads a deterioration in service for all customers -- increased static, the inability to complete a call ("blocked" calls) and involuntary disconnections ("dropped" calls).

Revenue Loss

obtain a second cellular phone which is invisible to Cellular One®'s system, emulation allows customers to avoid paying the monthly access fee to which Cellular One® is

entitled under its tariff. Because it is impossible to determine how many emulated "extension" phones are in use on the Cellular One® system, it is impossible to determine just how much revenue the Company is losing.

John P. Hart, Jr.

Sworn to before me this 25 day of April, 1995.

Notary Publis

DESCRIM A DIPLATA
A Natury Public of New Jersey
the Commission Septem April 28, 1986

			1
			1
	•		1
			1
			,
			1
			1
			1
			'
			1
			1
			'
			1
			1
			1
			1
			1
			1
			1
			1
			5
			1
			1
			1
			'
			ı

PLAINTIFF'S MEMORANDUM OF LAW IN SUPPORT OF ITS MOTION FOR A PRELIMINARY INJUNCTION AGAINST DEFENDANTS CELLULAR EMULATION SYSTEMS, INC. AND ALAN J. GEDACHIAN

> FRIEDMAN & KAPLAN LLP 875 Third Avenue New York, New York 10022 (212) 833-1100

Attorneys for Plaintiff Cellular Telephone Company

May 24, 1995

TABLE OF CONTENTS

																				<u>P</u>	age
TABLE OF A	AUTHOR	RITIES	5.	•	•			•												j	Lii
PRELIMINA	RY STA	TEMEN	IT .	•	•				•	•								•	•		2
PROCEDURAL	L HIST	ORY		•	•			•						•	•		•		•		4
STATEMENT	OF F	ACTS		•	•	•		•							•		•	•	•		5
Backo	ground	i		•		•		•	•	•	•				•		•	•	•	•	5
The F	Harm (Caused	d b	ΓE	mu]	lat	io	n	•	•		•	•	•	•	•		•	•		7
Defer	ndants	cor	duc	t	•			•	•	•	•	•	•		•	•	•	•	•		9
The I	Import	ance	of	De	fer	nda	int	s'	R	.ec	or	ds			•	•	•	•	•		10
ARGUMENT				•	•	•	•	•	•		•	•	•			•		•	•		11
I.	CAN E	FCC BA BE ENE ON UNI	ORC	ED	B:	Y P	A P	RI	VA	TE)		•	•	•	•	•	•	•	11
II.		F.R. BIT I JLAR T	EFE	ND	AN'	rs	FR	OM	Ε	MU				•	•		•	•	•		15
	Α.	The E SS 22 Emula	2.91	9 (a)	ar	ıd	22									:		•	•	16
	В.	The Content																3	•	•	18
	c.	Other Relie Viola	ef t	o ig	Pro	eve C.	rt F.	E R.	mu S	la	to	rs	f	ro	m	.ve		•	•	•	21
III.	CELLU	JLAR (LR Y	C			22

TABLE OF CONTENTS

(continued)

IV.	CELLULAR ONE® IS ENTITLED TO A PRELIMINARY
	INJUNCTION EVEN IF TRADITIONAL EQUITABLE
	PRINCIPLES ARE APPLIED
V.	DEFENDANTS SHOULD BE PROHIBITED FROM
	DESTROYING OR DISCARDING THEIR RECORDS
	DURING THE PENDENCY OF THIS CASE 2
CONCLUSIO)N

TABLE OF AUTHORITIES

<u>I</u>	Page	<u>(s)</u>
<u>Cases</u>		
<u>Able v. United States</u> , 44 F.3d 128 (2d Cir. 1995) (per curiam)		25
Alltel Tenn., Inc. v. Tennessee Public Serv. Comm'n, 913 F.2d 305 (6th Cir. 1990)		13
Bowles v. Seminole Rock & Sand Co., 325 U.S. 410, 65 S. Ct. 1215 (1945)		19
Capital Network Sys., Inc. v. FCC, 28 F.3d 201 (D.C. Cir. 1994)		20
Chesapeake & Potomac Tel. Co. v. Public Serv. Comm'n, 748 F.2d 879 (4th Cir. 1984) (per curiam), vacated on other grounds, 476 U.S. 445 (1986) .		12
Columbia Broadcasting System, Inc. v. United States, 316 U.S. 407 (1942)		14
In re Comcast Cor . Cable TV Rate Reg., 1994 WL 622109 (E.D. Pa. Nov. 10, 1994)		14
Gerard v. Almouli, 746 F.2d 936 (2d Cir. 1984)		25
<pre>Hawaiian Tel. Co. v. Public Util. Comm'n, 827 F.2d 1264 (9th Cir. 1987), cert. denied, 487 U.S. 1218 (1988) 13, 14,</pre>	17,	23
Illinois Bell Tel. Co. v. Illinois Commerce Comm'n, 740 F.2d 566 (7th Cir. 1984)	12,	23
<pre>Ives Labs., Inc. v. Darby Drug Co., 601 F.2d 631</pre>		26
Jersey Shore Broadcasting Corp. v. FCC, 37 F.3d 1531 (D.C. Cir. 1994)	19,	20
Mallenbaum v. Adelphia Communications Corp., 1994 WL 724981 (E.D. Pa. Dec. 29, 1994)		14
Mical Communications, Inc. v. Sprint Telemedia, Inc. 1 F.3d 1031 (10th Cir. 1993)		23

iii

TABLE OF AUTHORITIES

(continued)

Notional Madical Estado Torres de 1919 de	Page(s)
National Medical Enters., Inc. v. Shalala, 43 F.3d 691 (D.C. Cir. 1995)	19
New England Tel. & Tel. v. Public Util. Comm'n,	
742 F.2d 1 (1st Cir. 1984), cert. denied,	
476 U.S. 1174 (1986)	13
Resolution Trust Corp. v. Elman, 949 F.2d 624	
(2d Cir. 1991)	25
Robertson v. Methow Valley Citizens Council,	
490 U.S. 332, 109 S. Ct. 1835	19
SEC v. Management Dynamics, Inc., 515 F.2d 801	
(2d Cir. 1975)	22
<u> Skandalis v. Rowe</u> , 14 F.3d 691 (2d Cir. 1994)	19
South Central Bell Tel Co. v. Louisiana Pub. Serv.	•
Comm'n, 744 F.2d 1107 (5th Cir. 1984),	
<u>vacated on other grounds</u> , 476 U.S. 1166 (1986)	-14. 21-23
	,
Southwestern Bell Tel. Co. v. Arkansas Pub. Serv. Comm'n, 738 F.2d 901 (8th Cir. 1984), vacated	
on other grounds, 476 U.S. 1167 (1986)	
Southwestern Bell Tel. Co. v. Public Util. Comm'n,	
812 F. Supp. 706 (W.D. Tex. 1993)	. 23, 24
Stinson v. United States, 113 S. Ct. 1913 (1993) .	10 20
scinson v. diffed States, 113 3. Cc. 1913 (1993) .	. 19, 20
Wali v. Coughlin, 754 F.2d 1015 (2d Cir. 1985)	27
Statutes, Rules and Regulations	
	17 22-25
47 U.S.C. § 401(b)	11, 22-23
47 U.S.C. § 402(a)	14
47 U.S.C. § 406	23

TABLE OF AUTHORITIES (continued)

									Page	<u>(s)</u>
		22.919(a			-	6,	14-16,	18, 2	1-23,	27
		22.933, (1994)		-		6,	14-16,	18, 2	1-23,	27
Miscel	laneou	is.								
		James W. [1] (199							. 22,	26
F	Revisio	nunication on of Par .ng Publi	t 22 o	f Com	missio	n's	Rules			-
9	2-115	(Sept. 9	9, 1994)		•	. 16-3	L9, 22	2, 24,	27
t	Compati co FCC	stem Mobi bility S Report a	Specifi and Ord	catio	n, Ap May	per 1, 1	ndix D 1981,		. 15.	22

UNITED STATES DISTRICT COURT EASTERN DISTRICT OF NEW YORK

CELLULAR TELEPHONE COMPANY, d/b/a

95 Civ. 1666 (SJ)

Plaintiff,

-against-

CELLULAR ONE®

CELLULAR TWO, INC., TONY YANKOVSKY, CELLULAR EMULATION SYSTEMS, INC., and ALAN J. GEDACHIAN,

Defendants.

PLAINTIFF'S MEMORANDUM OF LAW IN SUPPORT OF ITS MOTION FOR A PRELIMINARY INJUNCTION AGAINST DEFENDANTS CELLULAR EMULATION SYSTEMS, INC. AND ALAN J. GEDACHIAN

Plaintiff Cellular Telephone Cor pany ("Cellular One®") respectfully submits this memorandum in support of its motion for a preliminary injunction pursuant to section 401(b) of the Communications Act of 1934, 47 U.S.C. \$ 401(b). Cellular One® seeks an order enjoining defendants Cellular Emulation Systems, Inc. ("CES") and Alan J. Gedachian, during the pendency of this action, from further violations of 47 C.F.R. §§ 22.919(a) and 22.933, Federal Communications Commission ("FCC") regulations that prohibit any person from altering a cellular telephone so that it

"emulates" the electronic serial number ("ESN") of a different cellular phone.1

PRELIMINARY STATEMENT

Every cellular telephone is manufactured with a unique electronic serial number. When a call is placed or received, the cellular phone transmits its ESN, allowing the cellular service provider to identify the subscriber, to authorize use of the cellular network, and to track the call for billing purposes.

It is possible, however, to alter a cellular telephone's ESN -- to cause it to mimic or "emulate" the ESN of a different phone. Technological pirates tampering with cellular phones so that they emulate the ESNs of telephones belonging to unsuspecting cellular subscribers stell hundreds of millions of dollars worth of cellular service each year, and cause hundreds of millions of dollars worth of calls to be improperly billed to legitimate customers. Other persons, such as the defendants in this case, create unauthorized and unlawful "extension" phones for existing

2

5004.1

This memorandum supersedes plaintiff's prior Memorandum of Law in Support of Motion for a Preliminary Injunction, dated April 25, 1995. The memorandum has been revised to take account of (a) plaintiff's settlement with defendants Cellular Two, Inc. and Tony Yankovsky; and (b) the May 10, 1995 amendment to the complaint.

cellular subscribers by altering one or more phones to emulate the ESN of the customer's one authorized telephone.

Altering a cellular telephone so that it emulates a different phone's ESN, or knowingly using such altered equipment, violates the regulations of the FCC. Moreover, the use of unauthorized "extension" phones severely and irreparably injures cellular service providers such as Cellular One®. As we explain below, it impedes industry and law enforcement efforts to combat fraud; it interferes with the functioning of cellular networks; and it causes substantial, unquantifiable revenue loss.

47 U.S.C. § 401(b) creates a private right of action for injunctive relief on behalf of a party injured by any person's failure to obey an FCC order. The statute provides that if the defendant is disobeying an FCC order regularly made and duly served, "the court shall enforce obedience to such order by a writ of injunction or other proper process . . . " Id. Accordingly, Cellular One® seeks an order enjoining defendants CES and Gedachian from altering any cellular telephone ESN, in violation of 47 C.F.R. §§ 22.919(a) and 22.933. Because Cellular One® cannot determine which of its customers are using unauthorized phones with altered ESNs other than by a review of defendants' records, Cellular One® also seeks an order

3

prohibiting defendants <u>pendente</u> <u>lite</u> from destroying any of their records relating to the emulation of cellular telephone ESNs.

PROCEDURAL HISTORY

By order to show cause dated April 26, 1995, Cellular One® moved for a preliminary injunction barring all defendants from emulating cellular telephones, in violation of 47 C.F.R. § 22.919(a). On May 10, 1995, Cellular One® served an amended complaint (Exh. G to Kaplan Aff.), clarifying its allegation that defendants' emulation activities violate 47 C.F.R. § 22.933, as well as § 22.919(a).

Two of the defendants in this action, Cellular Two, Inc. and Tony Yankovsky, have entered into a written settlement agreement with Cellular One® agreeing to the entry of a permanent injunction prohibiting them from emulating cellular telephones. As required by the settlement agreement, Cellular Two, Yankovsky, and Cellular One® jointly submitted to the Court proposed Findings of Fact and Conclusions of Law, as well as a proposed final judgment permanently enjoining Cellular Two and Yankovsky from further emulation activities. Accordingly, the present motion for a preliminary injunction seeks relief against defendants CES and Gedachian only.

4

STATEMENT OF FACTS

The facts relevant to this application are set forth in full in the accompanying affidavits of John P.

Hart, Jr., Cellular One®'s Vice-president, Engineering (Exh. A to Kaplan Aff.), and Salvador Vega, an investigator employed by the NYSEC Group, the private investigation agency retained by Cellular One® to investigative ESN emulation (Exh. F to Kaplan Aff.). The facts are briefly summarized below.

Background

Cellular Telephone Company, doing business as

Cellular One®, is licensed by the FCC as the exclusive

provider of cellular communications services on its

authorized frequencies in the New York Metropolitan

Statistical Area, which includes, among other regions, New

York City and Long Island. Customers of Cellular One® pay

fees to the company, including a monthly access charge and a

per-call usage fee, in exchange for the ability to use their

individual cellular telephones on Cellular One®'s network.

When a customer initiates or receives a call, his or her phone is uniquely identified to the cellular system by its 32-bit electronic serial number, a number permanently assigned to the phone. (Hart Aff. ¶¶ 2-3) If the system recognizes the ESN as belonging to a customer's phone, it